IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: **Kirby et al.**   §
                                                          §   Group Art Unit: **2154**
Serial No. **09/692,365**   §
                                                          §   Examiner: **Ashokkumar B. Patel**
Filed: **October 19, 2000**   §
                                                          §
For: **Method and Apparatus for**   §
Dynamic Retention of System Area   §
Network Management Information in
Non-Volatile Store

Commissioner for Patents
P.O. Box 1450   **35525**
Alexandria, VA 22313-1450   PATENT TRADEMARK OFFICE
                                                           CUSTOMER NUMBER

REPLY BRIEF (37 C.F.R. 41.41)

This Reply Brief is submitted in response to the Examiner's Answer mailed on June 14, 2007.

No fees are believed to be required to file a Reply Brief. If any fees are required, I authorize the Commissioner to charge these fees which may be required to IBM Corporation Deposit Account No. 09-0447.

RESPONSE TO EXAMINER'S ANSWER

This Reply Brief is filed to address the issues raised by the Examiner in his Answer mailed June 14, 2007.

Appellants claim responsive to a power cycle, <u>obtaining</u> current configuration information <u>from</u> the set of components. *Pelissier* does not teach this. *Pelissier* teaches <u>writing</u> information (i.e. an address and a forwarding database) <u>to</u> a device during initialization, which occurs after the device has been powered-up.

Pelissier describes destination address routing, explicit routing, and direct routing. Direct routing is a combination of destination address and explicit routing.

When destination address routing is used, a destination address is inserted into a data cell. Each switch must include a forwarding database. The switch uses the destination address and forwarding database to determine how to route the data cell. The forwarding database must be configured in a switch before data cells can be routed through the switch.

When explicit routing is used, the entire route that a cell is to traverse is explicitly stated within the cell itself. Devices in the network do not need a forwarding database for explicit routing.

According to *Pelissier*, each cell includes a destination address (DA) field, which is used to specify either destination address routing or explicit routing. Destination address routing is specified when the address in the DA field is a specific address. Explicit routing is specified when the address in the DA field is a permissive address. The permissive address is a predetermined global address that is interpreted by devices in the network as being explicitly addressed to it.

The central network manager 150 first discovers the topology of the network 100 and then generates a forwarding database for each device in the network. The central network manager then initializes each device in the network. This process is described in *Pelissier*, column 13, line 30, through column 14, line 34, and in Figure 6. Specifically, block 610, which includes blocks 615 and 620, teaches device initialization.

At power-up, the devices in the network are not initialized. Devices power up with the permissive address initially assigned to them, but they power-up without specific MAC addresses

assigned to them. A hardware vendor may provide a permissive address (a Device GUID), which may be read or queried by central network manager 150 even before the device is initialized. However, at power-up, the devices do not have a forwarding database.

After the devices have powered-up, the central network manager initializes each device. Each device is initialized using explicit routing. A MAC address is then assigned to the device and a forwarding database is written to it. The central network manager accomplishes this process using a management cell. The "central network manager 150 may initialize the address of the switch manager 204 of a device using an explicitly routed management cell by providing the explicit route for the cell in the IPath( ) field 436 (FIG. 4), setting the DA field 414 to the Permissive address, specifying the Set( ) command in the CMD field 410 and by setting the COD field 428 in the cell to MAC_address. Other fields in the management cell will be initialized as described above for an outbound cell. The new MAC address for the device (assigned to the switch manager 204) is carried in the Data field 434 (FIG. 4) of the management cell." *Pelissier*, column 13, lines 50-64. That is, data (the new MAC address) is written to the device upon the device being initialized after being powered up.

Thus, the address of the switch manager 204 is initially set to the permissive address at power-up. At power-up, the device does not have either a MAC address or a forwarding table. At this time, the device can route cells using only explicit routing.

After each device has been initialized and has received its forwarding database and MAC address, cells can be routed either using destination address routing or explicit routing.

It is important to note that a device is not initialized and does not include a forwarding database or MAC address at power-up. After being powered-up, a device is initialized and receives a forwarding database and MAC address. A device is <u>not queried</u> upon being powered-up. It is initialized after being powered-up, which means data (e.g. forwarding database and MAC address) is <u>written to it</u> after it is powered-up.

Appellants claim obtaining current configuration information <u>from</u> the set of <u>components</u> responsive to a power cycle. *Pelissier* does not teach obtaining configuration information <u>from a device</u> upon powering up the device. *Pelissier* teaches the opposite. *Pelissier* teaches initializing a device after being powered up, which includes <u>sending</u> a MAC address to the device using a data field in a management cell. In addition, a forwarding database is <u>written</u> to the device.

Thus, *Pelissier* teaches sending information <u>to the device</u>, not obtaining information <u>from</u>

the device, after power up. Therefore, *Pelissier* does not anticipate Appellants' claims.

Also according to Appellants' claims, the current information, which was obtained from the set of components responsive to a power cycle, is compared to the stored configuration information to form a comparison. Since *Pelissier* does not teach obtaining current configuration information from the set of components responsive to a power cycle, *Pelissier* cannot teach comparing the current configuration information with the stored information to form a comparison.

Appellants also claim updating the stored configuration information if a difference is present in the comparison. *Pelissier* cannot teach updating the stored information if a difference is present in the comparison because *Pelissier* does not teach a comparison of stored configuration information with current configuration information that was obtained responsive to a power cycle.

In the Examiner's Answer on page 18, the Examiner states "wherein 'means of initializing devices in the network, detecting faults in the network, of detecting topology changes, and to make appropriate changes to the forwarding databases as a result' by the central network manager is understood. (And thereby 'responsive to a power cycle, current configuration information from a set of components in a network computer system is obtained and compared to stored configuration information to determine if there are differences and, if there are, the stored configuration information is updated' is understood." Appellants respectfully disagree.

The passage quoted by the Examiner is located in *Pelissier*, column 5, lines 34-48. The means of initializing devices in the network, referred to in the quoted passage, is taught in more detail in column 13, line 30, through column 14, line 34. The initializing takes place upon devices being powered-up, and has been discussed above.

The remaining functions referred to in the quoted passage (i.e. detecting faults in the network, of detecting topology changes, and to make appropriate changes to the forwarding databases as a result) occur <u>after devices have been initialized</u> and during operation of the network. These remaining functions do not occur <u>responsive to a power cycle</u>. Therefore, these other functions do not teach "responsive to a power cycle, obtaining current configuration information from the set of components".

As discussed above, *Pelissier* does not teach responsive to a power cycle, <u>obtaining</u> current configuration information <u>from</u> the set of components. *Pelissier* teaches <u>writing</u>

information (i.e. an address and a forwarding database) <u>to</u> a device during initialization, which occurs after the device has been powered-up.

<u>CONCLUSION</u>

Appellants rely on the Appeal Brief with reference to all other comments made by the Examiner in the Examiner's Answer. Appellants believe the claims are allowable over the cited prior art and that the application is in condition for allowance. Accordingly, Appellants respectfully request the Board of Patent Appeals and Interferences to overturn the rejections set forth in the Final Office Action.

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